

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Appln. No: To Be Assigned  
Applicants: M. Kito et al.  
Filed: Herewith  
Title: SEMICONDUCTOR LASER DEVICE AND FABRICATION METHOD THEREOF  
TC/A.U.:  
Examiner:  
Confirmation No.:  
Docket No.: YAO-4316US1

Divisional of:  
Appln. No: 09/521,512  
Applicants: M. Kito et al.  
Filed: March 8, 2000  
Title: SEMICONDUCTOR LASER DEVICE AND FABRICATION METHOD THEREOF  
TC/A.U.: 2828  
Examiner: Quyen Phan Leung  
Confirmation No.: 1089  
Docket No.: YAO-4316US

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98 and to the duty of disclosure set forth in 37 C.F.R. § 1.56, the Examiner in charge of the above-identified application is requested to consider and make of record the references listed on the PTO 1449 (R&P) submitted herewith.

Although the information submitted herewith may be "material" to the Examiner's consideration of the subject application, this submission is not intended to constitute an admission that such information is "prior art" as to the claimed invention.

In accordance with 37 C.F.R. § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.

Under 37 C.F.R. § 1.98(d), copies of the patents and publications listed on the enclosed PTO Form 1449 are not required to be provided, because they were cited by or submitted to the Patent and Trademark Office in prior application Serial No. 09/521,512, filed March 8, 2000, which is relied upon for an earlier filing date under 35 U.S.C. § 120.

This Information Disclosure Statement is being filed concurrently with the above-referenced application.

Respectfully submitted,

*Daniel N. Calder*

Daniel N. Calder, Reg. No. 27,424  
Attorney for Applicants

DNC/mc

Enclosures: PTO Form 1449

Dated: July 28, 2003

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*Kathleen Libby*  
Kathleen Libby

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# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT** *(Use as many sheets as necessary)*

**SHEET 1 of 2**

## **Complete if Known**

|                      |                |
|----------------------|----------------|
| Application Number   | To Be Assigned |
| Filing Date          | Herewith       |
| First Named Inventor | M. Kito et al. |
| Art Unit             |                |
| Examiner Name        |                |
| Attorney Docket No.  | YAO-4318US1    |

## **U.S. PATENT DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Document Number<br>Number - Kind Code <sup>2</sup> (If known) | Publication Date<br>(MM-DD-YYYY) | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|--------------------|-----------------------|---|----------------------------------|--|---|
|                    |                       | US-5,114,877  | 05/1992                          | Paoli et al.                                       |   |
|                    |                       | US-5,276,702  | 01/1994                          | Meliga   |   |
|                    |                       | US-   |                                  |  |   |
|                    |                       | US-   |                                  |  |   |
|                    |                       | US-   |                                  |  |   |
|                    |                       | US-   |                                  |  |   |
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|                    |                       | US-   |                                  |  |   |
|                    |                       | US-   |                                  |  |   |

## **FOREIGN PATENT DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Foreign Patent Document<br>Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (If known) | Publication Date<br>(MM-DD-YYYY) | Name of Patentee or<br>Applicant of Cited Document      | Pages, Columns, Lines, Where Relevant<br>Passages or Relevant<br>Figures Appear | T <sup>6</sup>           |
|--------------------|-----------------------|--|----------------------------------|---|---|--------------------------|
|                    |                       | 03025990   | 02/04/1991                       | Nec Corp.   |   | <input type="checkbox"/> |
|                    |                       | EP 0 706 243-A2  | 04/10/1996                       | Matsushita<br>Electric Industrial<br>Co. Ltd.           |   | <input type="checkbox"/> |
|                    |                       | JP2763090-B2 (corresponds to EP 0 706<br>243-A2 above)   | 03/27/1998                       | Matsushita<br>Electric Industrial<br>Co. Ltd.           |   | <input type="checkbox"/> |
|                    |                       | EP 0513745-A2  | 11/19/1992                       | CSELT Centro<br>Studi e Laboratori<br>Telecomunicazioni |   | <input type="checkbox"/> |
|                    |                       | 10022564   | 01/23/1998                       | Nec Corp.   |   | <input type="checkbox"/> |
|                    |                       | 1106489  | 04/24/1989                       | Fujitsu Ltd.  |   | <input type="checkbox"/> |
|                    |                       | EP 0494766-A2  | 07/15/1992                       | Xerox Corporation                                       |   |                          |

|                       |  |                    |  |
|-----------------------|--|--------------------|--|
| Examiner<br>Signature |  | Date<br>Considered |  |
|-----------------------|--|--------------------|--|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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<sup>2</sup>See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.

<sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard St.3).

<sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

<sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.

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The collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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| Art Unit             |                |
| Examiner Name        |                |
| Attorney Docket No.  | YAO-4316US1    |

SHEET 2 of 2

**NON-PATENT LITERATURE DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published  | T <sup>2</sup>           |
|--------------------|-----------------------|---|--------------------------|
|                    |                       | European Search Report dated October 10, 2001, application no. EP00104472   | <input type="checkbox"/> |
|                    |                       | M. Asada et al., "Gain and the Threshold of Three-Dimensional Quantum-Box Lasers", IEEE Journal of Quantum Electronics, Vol. OE-22, No. 9, pp. 1915-1921, September 1986  | <input type="checkbox"/> |
|                    |                       | S. Aral et al. "GaInAsP/InP Long-Wavelength Quantum-Wire Semiconductor Lasers", PROCEEDINGS OF THE 1997 ELECTRONICS SOCIETY CONFERENCE OF INSTITUTE OF ELECTRONICS, INFORMATION AND COMMUNICATION ENGINEERS, pp. 266-267, August 13, 1997 (partial translation) | <input type="checkbox"/> |
|                    |                       |   | <input type="checkbox"/> |
|                    |                       |   | <input type="checkbox"/> |
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Examiner  
SignatureDate  
Considered

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<sup>1</sup>Applicant's unique citation designation number (optional).

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